

ABSTRACT

NARROW WRITE HEAD POLE TIP FABRICATED BY SIDEWALL PROCESSING

The magnetic head includes a P2 pole tip in which the P2 pole tip material is electroplated upon a sidewall of the P2 pole tip photolithographic trench. To accomplish this, a block of material is deposited upon a write gap layer, such that a generally straight, vertical sidewall of the block of material is disposed at the P2 pole tip location. Thereafter, an electroplating seed layer is deposited upon the sidewall. A P2 pole tip trench is photolithographically fabricated such that the sidewall (with its deposited seed layer) is exposed within the P2 pole tip trench. Thereafter, the P2 pole tip is formed by electroplating pole tip material upon the seed layer and outward from the sidewall within the trench. The width of the P2 pole tip is thus determined by the quantity of pole tip material that is deposited upon the sidewall.